

XX	PR	26-OCT-1988;	88JP-0268302.
XX	PA	(TOFU) TOA NENRYO KOGYO KK.	
XX	DR	WPI: 1990-176228/23.	
XX	N-PSDB; AAQ04719.		
XX	PT	Human serum albumin prep. by yeast host -	
XX	PT	by culturing transformed plasmid yeast to produce serum, and	
XX	PT	removing it.	
XX	PS	Disclosure; ; PP: Japanese.	
XX	CC	Mature HSA-A may be produced using the sequence incorporated into a	
CC	CC	plasmid vector with suitable controllers, and transferred to a yeast	
CC	CC	expression system.	
XX	Sequence	585 AA;	
SQ	Query Match	100.0%	Score 3103; DB 11; Length 585;
	Best Local Similarity	100.0%	Prod. No. 1e-254;
	Matches	585;	Mismatches 0;
	Conservative	0;	Indels 0;
			Gaps 0;
QY	1	DAHKSEVAHREFDQIGRENFKAFLVIAFAQYLQOCPPEDAYKLYNNEFATCVCADES	60
Db	1	DAHKSEVAHREFDQIGRENFKAFLVIAFAQYLQOCPPEDAYKLYNNEFATCVCADES	60
QY	61	NCDSLHLFGKLCTVATLRETGYEMADCCAKQEPERNECPLQHQDKDNPNLPRVYPPEV	120
Db	61	NCDSLHLFGKLCTVATLRETGYEMADCCAKQEPERNECPLQHQDKDNPNLPRVYPPEV	120
QY	121	DYMCATAFDNEETFLKKLYEIAARRHPFYAAPELFFAFKRYKAFTCCQQAQDQKACLIP	180
Db	121	DYMCATAFDNEETFLKKLYEIAARRHPFYAAPELFFAFKRYKAFTCCQQAQDQKACLIP	180
QY	181	KLDLERDGKASSAKORLKCASTQKGERAKAWAVARLSQRSPKAFAEYSKLVDTLK	240
Db	181	KLDLERDGKASSAKORLKCASTQKGERAKAWAVARLSQRSPKAFAEYSKLVDTLK	240
QY	241	VHTECCHGDLICACDADRALKTICENDODISSKLKECECEKPLLEKSHCIAEVENDEMA	300
Db	241	VHTECCHGDLICACDADRALKTICENDODISSKLKECECEKPLLEKSHCIAEVENDEMA	300
QY	301	DLPSLAAFEVKDKICKNYEAADYFQEMLYIYARRHEDYSTVLLRLATYETTLKC	360
Db	301	DLPSLAAFEVKDKICKNYEAADYFQEMLYIYARRHEDYSTVLLRLATYETTLKC	360
QY	361	CAADPHFCYAKVEDDEKPLVYERQNLKONCELFQOLGEYKQNANALYRPTKKPQYST	420
Db	361	CAADPHFCYAKVEDDEKPLVYERQNLKONCELFQOLGEYKQNANALYRPTKKPQYST	420
QY	421	PTLVEVSRNLGVGSGCKCKHPEAKRMCAEDYLSTVLNQLCVLHEKTPVSDFRVTCCTES	480
Db	421	PTLVEVSRNLGVGSGCKCKHPEAKRMCAEDYLSTVLNQLCVLHEKTPVSDFRVTCCTES	480
QY	481	LYNERPCTSALEYDETYVPEKFNAETTFHDADICLSEKERQKQPALVELVKHKPAT	540
Db	481	LYNERPCPSALEDETYVPEKFNAETTFHDADICLSEKERQKQPALVELVKHKPAT	540
QY	541	KEQLKAVMDPFAFYEKCKADKEDECPAEBKLUVAASQAILG	585
Db	541	KEQLKAVMDPFAFYEKCKADKEDECPAEBKLUVAASQAILG	585

DE	Human serum albumin.	Do	361 CAAADPHECYAKVDEEKFPLVVEEPQLNLIKONCELEFQLGKFKONALLVRYTKVQVST
XX	HSA; folding; ss.	Qy	421 PFLVEYRNLGKVGSCKCKHFEAKMPCPEDIYSVVLINQCVLLEKTPVSDRVTRCCTES
XX	Homo sapiens	Db	421 PFLVEYRNLGKVGSCKCKHFEAKMPCPEDIYSVVLINQCVLLEKTPVSDRVTRCCTES
OS		Qy	480
XX		Db	480
FH	Key	Qy	481 LVNRRCFSALEDETVPKBENATTFPHADICLSEKERQIRKTALELVKHKPKAT
FT	Region	Db	481 LVNRRCFSALEDETVPKBENATTFPHADICLSEKERQIRKTALELVKHKPKAT
FT	Region	Qy	540
FT	Region	Db	540
FT	Region	Qy	541 KEQLKAVMDDFAFVEKCKADDKETCFEEGKKLYAASOAGL
FT	Region	Db	541 KEQLKAVMDDFAFVEKCKADDKETCFEEGKKLYAASOAGL
NN	JP02227079-A.	Qy	585
XX		Db	585
PD	25-Aug-1989.	Qy	421 PFLVEYRNLGKVGSCKCKHFEAKMPCPEDIYSVVLINQCVLLEKTPVSDRVTRCCTES
XX		Do	AAR80301 standard; Protein; 585 AA.
PF	10-SEP-1990;	ID	AAR80301
XX		XX	
PR	06-OCT-1988;	AC	AAR80301;
XX		XX	
PA	(TOFU) TONEN CORP.	DT	17-JAN-1996 (first entry)
XX		DE	Human serum albumin.
PA		XX	
DR	WPI: 1990-317325/42.	XX	Serum albumin; HSA; aspartyl protease-3; Yap3P;
DR	N-PSDB; AAQ06099.	KW	Saccharomyces cerevisiae.
XX		XX	
PT	New human serum albumin fragments - used to bond medicines and for	OS	Homo sapiens.
PT	protein(s).	XX	
PT	stated folding of protein(s).	PN	WO9523887-A1.
XX		XX	
PS	Claim 1; Fig 8; 24pp; Japanese.	PD	08-SEP-1995.
XX		XX	
CC	Fragments A-C of HSA are expressed as fusion proteins with the	PF	01-MAR-1995;
CC	signal peptide of E. coli alkaline phosphatase. The fragments are	XX	95WO-GB00434.
CC	selected for their specific properties. The C-terminal truncated	PF	05-MAR-1994;
CC	fragment, B, does not bind long-chain fatty acids but does bind to	XX	94GB-0004270.
CC	various medicines at the central region. The N-terminal truncated	XX	
CC	fragment, C, has good stability in protein folding. The central	PA	(DENZ) DELTA BIOTECHNOLOGY LTD.
CC	segment, A, has characteristics of both B and C.	PA	Gilbert SC, Kerry-Williams SM;
CC	See also AAQ06096-Q06098.	XX	
XX		XX	
SQ	Sequence 585 AA;	PI	
XX		DR	WPI: 1995-320572/41.
XX		DR	N-PSDB; AAQ06099.
Query Match	100.0%; Score 3103; DB 11; Length 585;	PT	Yeast with reduced levels of aspartyl protease 3 proteolytic
Best Local Similarity	100.0%; Pred. No. 1e-254;	PT	activity - used to secrete human albumin without protn. of the 45
Matches	585; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	XX	CC fragment
Qy	1 DAHKSEVAHREFDGLGENRNKALVIAAQYILOQCPFEDHVLYNEVTEFAKTCVADAE 60	CC	The cDNA given in AA098695, which encodes HSA (AAB0301), was subjected
Db	1 DAHKSEVAHREFDGLGENRNKALVIAAQYILOQCPFEDHVLYNEVTEFAKTCVADAE 60	CC	to site-directed mutagenesis to investigate the role of
Qy	61 NCDKSLHTLFQDKLKVATRETYGENADCCAKOPPERNECFLQHKDDNPPLPVRE 120	CC	CC endoproteases in the generation of a 45 kDa albumin fragment obtnd.
Db	61 NCDKSLHTLFQDKLKVATRETYGENADCCAKOPPERNECFLQHKDDNPPLPVRE 120	CC	CC when the cDNA is expressed in S. cerevisiae. Mutations were: R410A;
Qy	121 DYMCTAHDNEETFLFKLYIETARRHPPFYAPLLFEAKTFCQQAADFACILP 180	CC	CC L407A, I408V, Y409A; and R410A, K413Q, K414Q. The latter set of
Db	121 DYMCTAHDNEETFLFKLYIETARRHPPFYAPLLFEAKTFCQQAADFACILP 180	CC	CC mutations, especially improved stability of HSA to yeast Yap3P.
Qy	181 KLDLRLDRGKASSAKORLKASLOKEGRAFKAWARLQSOPKKAFAEYSKLVDTIK 240	CC	CC proteolytic cleavage, allowing increased prodn. of recombinant HSA.
Db	181 KLDLRLDRGKASSAKORLKASLOKEGRAFKAWARLQSOPKKAFAEYSKLVDTIK 240	XX	
Qy	241 VHTECGHGDLLCADDRADLAKYICENDSISLSSKKECEKPKLEKHCIAEVENDMPA 300	SQ	Sequence 585 AA;
Db	241 VHTECGHGDLLCADDRADLAKYICENDSISLSSKKECEKPKLEKHCIAEVENDMPA 300	Query Match	100.0%; Score 3103; DB 16; Length 585;
Qy	301 DLPSLADEFVESDVCRNTAEKQVFLGMFLYEARRHPDYSVVLLRLAKTYETLKC 360	Best Local Similarity	100.0%; Pred. No. 1e-254;
Db	301 DLPSLADEFVESDVCRNTAEKQVFLGMFLYEARRHPDYSVVLLRLAKTYETLKC 360	Matches	0; Mismatches 0; Indels 0; Gaps 0;
Qy	361 CAAADPHECYAKVDEEKFPLVVEEPQLNLIKONCELEFQLGKFKONALLVRYTKVQVST 420	Qy	1 DAHKSEVAHREFDGLGENRNKALVIAAQYILOQCPFEDHVLYNEVTEFAKTCVADAE 60
Db	361 CAAADPHECYAKVDEEKFPLVVEEPQLNLIKONCELEFQLGKFKONALLVRYTKVQVST 420	Db	1 DAHKSEVAHREFDGLGENRNKALVIAAQYILOQCPFEDHVLYNEVTEFAKTCVADAE 60
Qy		Qy	61 NCDKSLHTLFQDKLKVATRETYGENADCCAKOPPERNECFLQHKDDNPPLPVRE 120
Db		Db	61 NCDKSLHTLFQDKLKVATRETYGENADCCAKOPPERNECFLQHKDDNPPLPVRE 120
Qy		Qy	61 NCDKSLHTLFQDKLKVATRETYGENADCCAKOPPERNECFLQHKDDNPPLPVRE 120
Db		Db	61 NCDKSLHTLFQDKLKVATRETYGENADCCAKOPPERNECFLQHKDDNPPLPVRE 120
Qy		Qy	61 NCDKSLHTLFQDKLKVATRETYGENADCCAKOPPERNECFLQHKDDNPPLPVRE 120
Db		Db	61 NCDKSLHTLFQDKLKVATRETYGENADCCAKOPPERNECFLQHKDDNPPLPVRE 120

QY ||||||| DYMCTAHDNEETPKKLYTETARRHPPYTAPELFFAKRYKAATTECCQAIDKAACLLP 180
 DB ||||||| 121 DYMCTAHDNEETPLKKLYTETARRHPPYTAPELFFAKRYKAATTECCQAIDKAACLLP 180
 QY ||||||| 121 KLDLRLDEGKASSAKORLKCASLOKEGERAFKAWAVARLSQRFPAAFEVSKLYTDLK 240
 DB ||||||| 181 KLDLRLDEGKASSAKORLKCASLOKEGERAFKAWAVARLSQRFPAAFEVSKLYTDLK 240
 QY ||||||| 241 VTECCHGDLLECADDRADLAKYICENODISSKLKCCECPPLLEKSCLAEVENDEMA 300
 DB ||||||| 241 VTECCHGDLLECADDRADLAKYICENODISSKLKCCECPPLLEKSCLAEVENDEMA 300
 QY ||||||| 301 DLPSLAADF7E5KDVCKNAYAKDYLGLMFLYEARNRHPDSVVLRLAKIYTETLKC 360
 DB ||||||| 301 DLPSLAADF7E5KDVCKNAYAKDYLGLMFLYEARNRHPDSVVLRLAKIYTETLKC 360
 QY ||||||| 361 CAADPHECYAKVDEFPLVPEPQNLIKONCEFLQIGEYTFKQFONALILYRTKXKVPOST 420
 DB ||||||| 361 CAADPHECYAKVDEFPLVPEPQNLIKONCEFLQIGEYTFKQFONALILYRTKXKVPOST 420
 QY ||||||| 421 PTLVEYSRNLGKVGSCKKHPBKRMPCAEDYLSVVLNOLCYLHEKTPYSDRVTKCOTES 480
 DB ||||||| 421 PTLVEYSRNLGKVGSCKKHPBKRMPCAEDYLSVVLNOLCYLHEKTPYSDRVTKCOTES 480
 QY ||||||| 481 IYNRPGPSALEVDETYKPKFNAEFTFHADICLTSKEROKIKTQALVELYVHKHPKAT 540
 DB ||||||| 481 IYNRPGPSALEVDETYKPKFNAEFTFHADICLTSKEROKIKTQALVELYVHKHPKAT 540
 QY ||||||| 541 KEOIKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585
 DB ||||||| 541 KEOIKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585
 RESULT 5
 AAO20111
 ID AAO20111 standard; Protein; 585 AA.
 XX
 AC AAO20111;
 XX
 DT 06 AUG 2002 (first entry)
 XX HSA protein sequence related to the growth hormone protein.
 DE
 XX Serum albumin-growth hormone fusion protein; growth hormone;
 KW Down's syndrome.
 XX
 OS Unidentified.
 XX
 PN KR99076789-A.
 XX
 PD 15-OCT-1999.
 XX
 PF 25-JUN-1998; 98KR-0704914.
 XX
 PR 30-DEC-1995; 95GB-0026733.
 PR 19-DEC-1996; 96WO-GB03164.
 PA (DELA) DELTA BIOTECHNOLOGY LTD.
 XX
 DR WPI: 1997-363680/55.
 DR N-PSDB; AAK9568.
 XX
 PT Serum albumin-growth hormone fusion protein - useful to treat growth
 PT hormone related diseases, e.g. Down's syndrome
 XX
 PS Disclosure; Fig 6: 21pp; Korean.
 XX
 CC The invention relates to a serum albumin-growth hormone fusion protein -
 CC useful to treat growth hormone related diseases such as Down's syndrome.
 CC This sequence represents a HSA protein related to the serum albumin-
 CC growth hormone protein of the invention.
 XX
 Sequence 585 AA;

Query	Match	Score	DB	Length
QY DYMCTAHDNEETPKKLYTETARRHPPYTAPELFFAKRYKAATTECCQAIDKAACLLP 180	100.0%	3103;	DB 18;	Length 585;
DB 121 DYMCTAHDNEETPLKKLYTETARRHPPYTAPELFFAKRYKAATTECCQAIDKAACLLP 180	100.0%	Pred. No. 1e-254;		
QY 121 KLDLRLDEGKASSAKORLKCASLOKEGERAFKAWAVARLSQRFPAAFEVSKLYTDLK 240	Best Local Similarity 100.0%;	Mismatches 0;	Indels 0;	Gaps 0;
DB 181 KLDLRLDEGKASSAKORLKCASLOKEGERAFKAWAVARLSQRFPAAFEVSKLYTDLK 240	585;	Conservative 0;		
QY 241 VTECCHGDLLECADDRADLAKYICENODISSKLKCCECPPLLEKSCLAEVENDEMA 300	1 DAHSEVAHRFDLCTVATLRETGYEMACCQAQEPERNFCLOHQKDQDNPLPRVRFPEV 120			
DB 241 VTECCHGDLLECADDRADLAKYICENODISSKLKCCECPPLLEKSCLAEVENDEMA 300	61 NCDKSLHHTFGDKLCTVATLRETGYEMACCQAQEPERNFCLOHQKDQDNPLPRVRFPEV 120			
QY 301 DLPSLAADF7E5KDVCKNAYAKDYLGLMFLYEARNRHPDSVVLRLAKIYTETLKC 360	1 DAHSEVAHRFDLCTVATLRETGYEMACCQAQEPERNFCLOHQKDQDNPLPRVRFPEV 120			
DB 301 DLPSLAADF7E5KDVCKNAYAKDYLGLMFLYEARNRHPDSVVLRLAKIYTETLKC 360	61 NCDKSLHHTFGDKLCTVATLRETGYEMACCQAQEPERNFCLOHQKDQDNPLPRVRFPEV 120			
QY 361 CAADPHECYAKVDEFPLVPEPQNLIKONCEFLQIGEYTFKQFONALILYRTKXKVPOST 420	121 DYMCTAHDNEETPLKKLYTETARRHPPYTAPELFFAKRYKAATTECCQAIDKAACLLP 180			
DB 361 CAADPHECYAKVDEFPLVPEPQNLIKONCEFLQIGEYTFKQFONALILYRTKXKVPOST 420	61 NCDKSLHHTFGDKLCTVATLRETGYEMACCQAQEPERNFCLOHQKDQDNPLPRVRFPEV 120			
QY 421 PTLVEYSRNLGKVGSCKKHPBKRMPCAEDYLSVVLNOLCYLHEKTPYSDRVTKCOTES 480	121 DYMCTAHDNEETPLKKLYTETARRHPPYTAPELFFAKRYKAATTECCQAIDKAACLLP 180			
DB 421 PTLVEYSRNLGKVGSCKKHPBKRMPCAEDYLSVVLNOLCYLHEKTPYSDRVTKCOTES 480	61 NCDKSLHHTFGDKLCTVATLRETGYEMACCQAQEPERNFCLOHQKDQDNPLPRVRFPEV 120			
QY 481 IYNRPGPSALEVDETYKPKFNAEFTFHADICLTSKEROKIKTQALVELYVHKHPKAT 540	121 DYLDERDEGKASSAKORLKCASLOKEGERAFKAWAVARLSQRFPAAFEVSKLYTDLTK 240			
DB 481 IYNRPGPSALEVDETYKPKFNAEFTFHADICLTSKEROKIKTQALVELYVHKHPKAT 540	61 DYLDERDEGKASSAKORLKCASLOKEGERAFKAWAVARLSQRFPAAFEVSKLYTDLTK 240			
QY 541 KEOIKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585	121 DYLDERDEGKASSAKORLKCASLOKEGERAFKAWAVARLSQRFPAAFEVSKLYTDLTK 240			
DB 541 KEOIKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585	61 DYLDERDEGKASSAKORLKCASLOKEGERAFKAWAVARLSQRFPAAFEVSKLYTDLTK 240			
RESULT 6				
AAV84873				
ID AAV84873	standard; protein; 585 AA.			
XX				
AC AAV84873;				
XX				
DT 08 AUG 2000 (first entry)				
DB				
481 IYNRPGPSALEVDETYKPKFNAEFTFHADICLTSKEROKIKTQALVELYVHKHPKAT 540				
QY 541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
RESULT 7				
AAV84873				
ID AAV84873	standard; protein; 585 AA.			
XX				
AC AAV84873;				
XX				
DT 08 AUG 2000 (first entry)				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
QY 541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
RESULT 8				
AAV84873				
ID AAV84873	standard; protein; 585 AA.			
XX				
AC AAV84873;				
XX				
DT 08 AUG 2000 (first entry)				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
QY 541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
RESULT 9				
AAV84873				
ID AAV84873	standard; protein; 585 AA.			
XX				
AC AAV84873;				
XX				
DT 08 AUG 2000 (first entry)				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
QY 541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
RESULT 10				
AAV84873				
ID AAV84873	standard; protein; 585 AA.			
XX				
AC AAV84873;				
XX				
DT 08 AUG 2000 (first entry)				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
QY 541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
RESULT 11				
AAV84873				
ID AAV84873	standard; protein; 585 AA.			
XX				
AC AAV84873;				
XX				
DT 08 AUG 2000 (first entry)				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
QY 541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
RESULT 12				
AAV84873				
ID AAV84873	standard; protein; 585 AA.			
XX				
AC AAV84873;				
XX				
DT 08 AUG 2000 (first entry)				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
QY 541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
RESULT 13				
AAV84873				
ID AAV84873	standard; protein; 585 AA.			
XX				
AC AAV84873;				
XX				
DT 08 AUG 2000 (first entry)				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
QY 541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
RESULT 14				
AAV84873				
ID AAV84873	standard; protein; 585 AA.			
XX				
AC AAV84873;				
XX				
DT 08 AUG 2000 (first entry)				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
QY 541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
RESULT 15				
AAV84873				
ID AAV84873	standard; protein; 585 AA.			
XX				
AC AAV84873;				
XX				
DT 08 AUG 2000 (first entry)				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
QY 541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
RESULT 16				
AAV84873				
ID AAV84873	standard; protein; 585 AA.			
XX				
AC AAV84873;				
XX				
DT 08 AUG 2000 (first entry)				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
QY 541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
RESULT 17				
AAV84873				
ID AAV84873	standard; protein; 585 AA.			
XX				
AC AAV84873;				
XX				
DT 08 AUG 2000 (first entry)				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
QY 541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
RESULT 18				
AAV84873				
ID AAV84873	standard; protein; 585 AA.			
XX				
AC AAV84873;				
XX				
DT 08 AUG 2000 (first entry)				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
QY 541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				
DB				
541 KEQLKAVMDDEFAAFVTKCCKADDKETCFCAEGKLVAAQSQAGL 585				

/note= "optionally acetylated, and claimed under claim 56"

XX

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Page 5

181 KLDLDRDEGKASSAKRILKASLOKFGERAKFKAVALSRQRPKAFAEVSKLYTDLK 240
 241 VHTECRGDLLECADRADLAKYTCENODSTSSKLKECCCKPYLEKSHCIAEVENDEMA 300
 241 VHTRCHDGLLECADRADLAKYTCENODSTSSKLKECCCKPYLEKSHCIAEVENDEMA 300
 301 DLPSLAADEFVKYDVKYKNTAEAKDVEFLGMFLXKEYARRHDPYSVYLRLAKTYETTLCK 360
 301 DLPSLAADEFVKYDVKYKNTAEAKDVEFLGMFLXKEYARRHDPYSVYLRLAKTYETTLCK 360
 361 CAAADPHECYAKVDFEKPVLVEPQNLIKQNLFEQLGEYKQNLALIVRTKVPQYST 420
 361 CAAADPHECYAKVDFEKPVLVEPQNLIKQNLFEQLGEYKQNLALIVRTKVPQYST 420
 QY 421 PTLYVEVRNLGRVGSCKHPEAKRMPCAEIDLSQLVNLQCVLHEKTVTSDEVTCCTES 480
 DB 421 PTLYVEVRNLGRVGSCKHPEAKRMPCAEIDLSQLVNLQCVLHEKTVTSDEVTCCTES 480
 QY 481 LVNRRPCFSALEDETVPKFENAEFTFHADICLSEKERQIKKOTPALEYVKHKKPAT 540
 DB 481 LVNRRPCFSALEDETVPKFENAEFTFHADICLSEKERQIKKOTPALEYVKHKKPAT 540
 541 KEQLKAYMDDEAFAFKCKADDKETCPAEEGKLYASAQALG 585
 DB 541 KEQLKAYMDDEAFAFKCKADDKETCPAEEGKLYASAQALG 585

RESULT 8
 ABB79006
 ID ABB79006 standard; Protein; 585 AA.
 XX AC ABB79006;
 XX DT 01-AUG-2002 (first entry)
 DE Human mature albumin protein SEQ ID NO:18.

KW Human; growth hormone; hgh; albumin; human serum albumin; HSA;
 KW albumin fusion protein; cytostatic; anorectic; immunosuppressive;
 KW antidiabetic; antirheumatic; antiarthritic; psoriatic; cancer;
 KW non-Hodgkin's lymphoma; obesity; transplant rejection; psoriasis;
 XX type I diabetes mellitus; rheumatoid arthritis.
 OS Homo sapiens.

XX Key Location/Qualifiers
 FT Domain 1..194
 FT /Label= 1
 FT Domain 1..105
 FT /Label= subdomain
 FT Disulfide-bond 53..62
 FT Disulfide-bond 75..91
 FT Disulfide-bond 90..101
 FT Region 106..119
 FT /note= "flexible inter-subdomain linker region"
 FT Domain 120..194
 FT Disulfide-bond 124..169
 FT Disulfide-bond 168..177
 FT Domain 195..387
 FT /Label= 2
 FT Domain 195..291
 FT Disulfide-bond 245..253
 FT Disulfide-bond 265..279
 FT Disulfide-bond 278..389
 FT Region 292..315
 FT /note= "flexible inter-subdomain linker region"
 FT Domain 316..387
 FT Disulfide-bond 316..361
 FT Disulfide-bond 360..369

FT Domain 388..585
 FT /Label= 3
 FT Domain 388..491
 FT /Label= subdomain
 FT Disulfide-bond 392..438.
 FT /Label= 4
 FT Disulfide-bond 437..448
 FT /Label= 5
 FT Disulfide-bond 461..477
 FT /Label= 6
 FT Disulfide-bond 476..487
 FT Region 492..511
 FT /note= "flexible inter-subdomain linker region"
 FT Domain 512..585
 FT /Label= subdomain
 FT Disulfide-bond 514..559
 FT Disulfide-bond 558..567
 XX WO200179442-A2.
 XX PD 25-OCT-2001.
 XX PR 12-APR-2001; 2001WO-US11850.
 XX PR 12-APR-2000; 2000US-229358P.
 PR 25-APR-2000; 2000US-199384P.
 PR 21-DEC-2000; 2000US-256931P.
 XX (HUMA-) HUMAN GENOME SCI INC.
 XX PI Rosen CA, Haseltine WA;
 XX DR WPI: 2001-611723/70.
 XX DR N-PSSDB: ABN87288.
 XX PS New albumin fusion proteins, useful for treating diseases and disorders such as cancer, comprise therapeutic protein fused to albumin -
 XX PT PT
 XX PS Claim 1: Fig 11; 413PP; English.
 XX DR WPI: 2001-611723/70.
 XX DR N-PSSDB: ABN87288.
 XX PS Claim 1: Fig 11; 413PP; English.
 XX DR WPI: 2001-611723/70.
 XX DR N-PSSDB: ABN87288.
 XX PS The present invention describes an albumin fusion protein (I) comprising CC a therapeutic protein; X and (a fragment or variant of) albumin comprising a fully defined sequence in ABB79006 of 585 amino acids, CC (where the fragment or variant has albumin or therapeutic protein; X, CC activity). (I) can have cytostatic, anorectic, immunosuppressive, CC antidiabetic, antirheumatic, antiarthritic and psoriatic activities. CC Albumin fusion proteins are stabilised therapeutic proteins e.g. CC antibodies to C5, C242 and CD60 useful for treating various diseases CC and disorders such as non-Hodgkin's lymphoma, cancer, obesity, CC transplant rejection, type I diabetes mellitus, rheumatoid arthritis CC and psoriasis. Fusing albumin to therapeutic proteins stabilises the CC therapeutic protein, extends the shelf life and retains the in vitro or CC in vivo biological activity. It also reduces the need to formulate CC protein solutions with large excesses of carrier proteins to prevent CC loss of therapeutic proteins due to factors such as binding to the CC container. The fusion proteins are easily dispensed with a simple CC formulation requiring minimal post storage manipulation. The fusion of CC therapeutic proteins to albumin confers stability in aqueous or other CC solution. The present sequence represents the mature human albumin (HA) CC protein which is used in the exemplification of the present invention.
 XX SQ Sequence 585 AA;

Query Match 100.0%; Score 3103; DB 22; Length 585;
 Best Local Similarity 100.0%; Pred. No. 1e-254;
 Matches 585; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAHKSEVAHRFKDGLGEENFKALVLAFAQYLOQCPFEDHVKLYNEYTEFATCVADESAE 60
 1 DAHKSEVAHRFKDGLGEENFKALVLAFAQYLOQCPFEDHVKLYNEYTEFATCVADESAE 60
 61 NCDKSLHHTFGDKLCLVATLRETGYEMADCCAKQEFERNCEFCYLOQCPFEDHVKLYNEYTEFATCVADESAE 60
 61 NCDKSLHHTFGDKLCLVATLRETGYEMADCCAKQEFERNCEFCYLOQCPFEDHVKLYNEYTEFATCVADESAE 60

61 NCDKSLHHTFGDKLCLVATLRETGYEMADCCAKQEFERNCEFCYLOQCPFEDHVKLYNEYTEFATCVADESAE 60
 61 NCDKSLHHTFGDKLCLVATLRETGYEMADCCAKQEFERNCEFCYLOQCPFEDHVKLYNEYTEFATCVADESAE 60
 QY 121 DYMCTAHDNEETFLKRYLYEIAARRHPYTAPELFFAKRYKAFFTECQAAKACAILP 180

121 DYMCAFDNEETFLKXLYTSEARHPPYTAPELLFAKYKAFAFTECQADKAACLLP 180
 181 KLDERDEKGASSAKQLRKASLQKGERAFKAWAYRLSOREPKAFAEYSKVLTDLK 240
 181 KLDERDEKGASSAKQLRKASLQKGERAFKAWAYRLSOREPKAFAEYSKVLTDLK 240
 241 VHTECCHGPDLECADRADLAKYICENODSISSKLCCEKPKLLEKSCHIAEVENDPA 300
 241 VHTECCHGPDLECADRADLAKYICENODSISSKLCCEKPKLLEKSCHIAEVENDPA 300
 301 DLPSLAADFVEKDVKCKNAYAKDVLGMFLYEYARHPDSYVLLRLAKTYETTLERK 360
 301 DLPSLAADFVEKDVKCKNAYAKDVLGMFLYEYARHPDSYVLLRLAKTYETTLERK 360
 361 CAAAPHECTAYKTFDEKPVPEEPONLTKONCBLFOLGKYEKFONALIVRTKKVQPQST 420
 361 CAAAPHECTAYKTFDEKPVPEEPONLTKONCBLFOLGKYEKFONALIVRTKKVQPQST 420
 421 PTLYEVSRLKGKVSKCKHPEAKRMPGAEDYLSTVNLNQCVLKEKTFPVSDRVTCCTES 480
 421 PTLYEVSRLKGKVSKCKHPEAKRMPGAEDYLSTVNLNQCVLKEKTFPVSDRVTCCTES 480
 481 LVNRPFCSALEYDTPVPREKNAETFFPHADCLTSSEKRQIKKQPLVELVHKRPKAT 540
 481 LVNRPFCSALEYDTPVPREKNAETFFPHADCLTSSEKRQIKKQPLVELVHKRPKAT 540
 541 KEQLKAVMDDEAFAFVRCRADDKETCFAEEGRKLYVAASOAGL 585
 541 KEQLKAVMDDEAFAFVRCRADDKETCFAEEGRKLYVAASOAGL 585
 Db PS

RESULT 9

AAE13399 standard; Protein; 585 AA.

AAE13399;

12-FEB-2002 (first entry)

Human albumin (HA) protein.

XX Human; albumin; HB; fusion protein; immune system disorder; syphilis; transplant rejection; blood related disorder; myocardial infarction; hyperproliferative disorder; acute myeloid leukaemia; renal disorder; glomerulonephritis; cardiovascular disorder; arrhythmia; rhinitis; respiratory disorder; neurological disease; Alzheimer's disease; endocrine disorder; phaeochromoma; reproductive system disorder; KW measles; gastrointestinal disorder; irritable bowel syndrome; HIV; human immunodeficiency virus; wound healing; renal cell carcinoma; KW melanoma; gene therapy.

XX Homo sapiens.

FH Key

FT Domain

241	VHTECCHGDLIECADDRADLAKYTCENDSISSKLECCCKPLERKSHJAEVENDENMPA	300
301	DPLSAAADFYESKVCKNYEAADKFVGLMFLYEAYARHDPYSVILLRLAKTYETTLEK	360
301	DPLSAAADFYESKVCKNYEAADKFVGLMFLYEAYARHDPYSVILLRLAKTYETTLEK	360
361	CAAADPHECTAZKVEDBEFKLVEPEQNLKONCELEFOLGEKYKFQNALLYVTTKVPQST	420
361	CAAADPHECTAZKVEDBEFKLVEPEQNLKONCELEFOLGEKYKFQNALLYVTTKVPQST	420
421	PTLVE/SRNLGVGSKCCKHPEAKRMPQAEDYLISVILNQLCVLHLKTPVSDRVTKCCTES	480
421	PTLVE/SRNLGVGSKCCKHPEAKRMPQAEDYLISVILNQLCVLHKTPVSDRVTKCCTES	480
481	LWNRPCSALEDEVETYKEF/NAEFTFHADICLTSEKERQIKQTALVELVHKPKAT	540
481	LWNRPCSALEDEVETYKEF/NAEFTFHADICLTSEKERQIKQTALVELVHKPKAT	540
541	KEQIKAYMDDPAPAFYEKCCKADEDETCPAEECKLVIAASQAAIGL	585
541	KEQIKAYMDDPAPAFYEKCCKADEDETCPAEECKLVIAASQAAIGL	585

SUITE 10
AAM52567 AAM52567 standard; Protein; 585 AA.
AAM52567;
05-FEB-2002 (first entry)
Mature human serum albumin.
Human; serum albumin; HA; antiinflammatory; immunosuppressive; cardiant;
nootropic; neuroprotective; gene therapy; immune disorder; wound healing;
hyperproliferative disorder; renal disorder; cardiovascular disorder;
respiratory disorder; neurological disease; endocrine disorder;
reproductive system disorder; infectious disease;
gastrointestinal disorder.

Homo sapiens
WO200179444 - A2.

25-OCT-2001.

12-APR-2001; 2001WO-US12013.

12-APR-2000; 2000US-229358P.

21-DEC-2000; 2000US-256931P.

(HUMA-) HUMAN GENOME SCI INC.

Rosen CA, Haseltine WA;

WPI; 2001-616755/71.

Albumin fusion proteins comprising a therapeutic protein and albumin, useful in the treating immune system disorders (e.g. transplant rejection), blood related disorders (e.g. myocardial infarction) and

Claim 1; Fig 15; 605pp; English.

The present invention relates to albumin fusion proteins, which comprise a therapeutic protein and albumin. The present sequence is the protein sequence for mature human serum albumin (HSA), which was used to generate the fusion proteins of the present invention. The albumin fusion proteins are useful in the treatment, prevention, diagnosis, and/or detection of diseases/disorders such as immune system disorders (e.g., transplant rejection), blood related disorders (e.g., myocardial infarction,

hyperproliferative disorders (e.g. childhood acute myeloid leukemia), renal disorders (e.g. glomerulonephritis), cardiovascular disorders (e.g. arrhythmias), respiratory disorders (e.g. non-allergic rhinitis), neurological diseases (e.g. Alzheimer's disease), endocrine disorders (e.g. pheochromocytoma), reproductive system disorders (e.g. syphilis), infectious diseases (e.g. measles), gastrointestinal disorders (e.g. irritable bowel syndrome) and wound healing.

```

Query Match 100.0%; Score 3103; DB 22; Length 585;
Best Local Similarity 100.0%; Fred. No. 1e-254;
Matches 585; Conservative 0; Mismatches 0; Indels 0; Gaps 0

```

1 DAHKSEAVIRFDIGEENFKALVLLIAQYLOQCEPDEVKLNEVTEFAXTCYADESAE 60
2 61 NCDKSUHTLFGDKLCTYATLRLTYGENADCAKQPERNECFLQHKKDNPNUPLRYPEV 120
3 61 NCDKSUHTLFGDKLCTYATLRLTYGENADCAKQPERNECFLQHKKDNPNUPLRYPEV 120

131 DYSTAEDNEETLKKYLIEARRHPTYAAPELLEFAKRYAAETECOAAADKAACHTIP 180C

181	KILDERGASSAKURKASLQGEREFKAWAYARLSORPKAEFSKLTYLLIK	24 0
181	KILDERGASSAKURKASLQGEREFKAWAYARLSORPKAEFSKLTYLLIK	24 0
241	VHTECCEGDLLECADDRADLAKYICENQDSTSKECCEKPPLKEHSKHLAEVENTDEMPA	300
241	VHTECCHGDLLECADDRADLAKYICENQDSISKECCEKPPLERSKHLAEVENTDEMPA	300
301	DPLSAADEFVEKDVCCKNAYAKDVLGMFLYEYARRHDPYSVLLVRLAKTYETTLERK	366
301	DPLSAADEFVEKDVCCKNAYAKDVLGMFLYEYARRHDPYSVLLVRLAKTYETTLERK	360
261	2 X AND DUE TO THE INABILITY TO IDENTIFY THE CROWNED TUMOR CELLS	120

361 CAAADPHSCYAKVDEFKPLYEEPQNLIKQNCNELFEQOLGEYFQNALLYRVTKKVPQVST 420

421 PTLYEVSRLNLKYGSKCCCKHPEAKRMPCAEDYLSWVNLQCLVHLKEKTPVSDRTVKCCTES 480

卷之三

541 KEQLKAVMDFAAFAVEKCCAKDDKETCFAELEGKKLVAA SQAALGL 585

RESULTS 11

AAE13129 Standard; protein; 385 AA.

Human albumin (HA). Human; albumin; HA; fusion protein; therapeutic protein; pulmonary; immune system disorder; transplant refection; blood related disorder; myocardial infarction; hyperproliferative disorder; glomerulonephritis; childhood acute myeloid leukaemia; cardiovascular disorder; arrhythmia; respiratory disorder; gene therapy; non-allergic rhinitis; noctropic; neurological disease; Alzheimer's disease; reproductive system disorder; endocrine disorder; phaeochromocytoma; infectious disease; antiarrhythmic; measles; gastritis; oral disorder; irritability; bowel syndrome; thrombocytopenia.

wound healing; antiinflammatory; immunosuppressive; neuroprotective;
 cardiotonic; cytostatic; antileukaemic; antirheumatic; antimicrobial;
 renal disorder.

XX OS XX
 Homo sapiens.

Key	Location/Qualifiers
Domain	54..61
	/label= Loop_I
Domain	76..89
	/label= Loop_II
Domain	92..100
	/label= Loop_III
Domain	170..176
	/label= Loop_IV
Domain	247..252
	/label= Loop_V
Domain	266..277
	/label= Loop_VI
Domain	280..288
	/label= Loop_VII
Domain	362..368
	/label= Loop_VIII
Domain	439..447
	/label= Loop_IX
Domain	461..475
	/label= Loop_X
Domain	478..486
	/label= Loop_XI
Domain	560..566
	/label= Loop_XII
FT	
XX	
PN	WO200179443-A2.
XX	25-OCT-2001.
PD	
XX	12-APR-2001; 2001WO-US11924.
PF	
XX	12-APR-2000; 2000US-229353P.
PR	
XX	21-APR-2000; 2000US-1993BAP.
PR	
XX	21-DEC-2000; 2000US-226931P.
PA	(HUMA-) HUMAN GENOME SCI INC.
XX	Rosen CA, Haseltine WA;
XX	WPI: 2001-616754/71.
DR	N-PSDB; AAD21638.
PT	
XX	Albumin fusion proteins comprising a therapeutic protein and albumin useful in the treating immune system disorders (e.g. transplant rejection), blood related disorders (e.g. myocardial infarction) and hyperproliferative disorders -
PT	
XX	Claim 1; Fig 9; 360pp; English.
PS	
XX	The invention relates to albumin fusion proteins comprising therapeutic protein and human albumin (HA). Therapeutic protein fused to albumin have an extended shelf-life. The albumin fusion proteins are useful in the treatment, prevention, diagnosis and/or detection of diseases, disorders such as immune system disorders (e.g. transplant rejection, blood related disorders (e.g. myocardial infarction), hyperproliferative disorders (e.g. childhood acute myeloid leukaemia), renal disorders (e.g. glomerulonephritis), cardiovascular disorders (e.g. arrhythmia, respiratory disorders (e.g. non-allergic rhinitis), neurological diseases (e.g. Alzheimer's disease), endocrine disorders (e.g. phenochromoma), reproductive system disorders (e.g. syphilis), infectious diseases (e.g. measles), gastrointestinal disorders (e.g. irritable bowel syndrome) and wound healing. Nucleic acids encoding albumin fusion protein is used in gene therapy. The present sequence is human albumin (HA) protein.

Query Match	100.0%	Score 3103;	DB 22;	Length 585;
Best Local Similarity	100.0%	Freq.	No. 1e-54;	
Matches	585;	Mismatches	0;	
Matches	585;	Conservative	0;	Gaps 0
QY	1	DAHKSEVAHRKDGEENFKALVLIAFAQYLQOCPPFEDHVKLNEVTEFAKTCYADESAE 60.		
Db	1	DAHKSEVAHRKDGEENFKALVLIAFAQYLQOCPPFEDHVKLNEVTEFAKTCYADESAE 60		
QY	61	NCDSKSLHTLFGDKLCTVATLRTETYGMADCCAKOEPERNECTIQLQHKKDDNPNLPLVRVPEY 120		
Db	61	NCDSKSLHTLFGDKLCTVATLRTETYGMADCCAKOEPERNECTIQLQHKKDDNPNLPLVRVPEY 120		
QY	121	DYMCATAFHDENETFLKKLYEARRIRPYFAPELLEFAKRYKAIAFFCCQQAADDAACTILP 180		
Db	121	DYMCATAFHDENETFLKKLYEARRIRPYFAPELLEFAKRYKAIAFFCCQQAADDAACTILP 180		
QY	181	KLDDELDEGRASSAKQRLKCAISQKGERAFKAVAVARLSQRFPKAFAEYSKLVTDLTK 240		
Db	181	KLDDELDEGRASSAKQRLKCAISQKGERAFKAVAVARLSQRFPKAFAEYSKLVTDLTK 240		
QY	241	VHTECCHGDLLECADDRADLARYICENODTSISKIKECEKPLERSHCTAEVENDEPA 300		
Db	241	VHTECCHGDLLECADDRADLARYICENODTSISKIKECEKPLERSHCTAEVENDEPA 300		
QY	301	DPSLDAADFVESKDVCKYTAEAEDVFGMFLYETARRIDPSVYLRLAKTYYTETLKC 360		
Db	301	DPSLDAADFVESKDVCKYTAEAEDVFGMFLYETARRHDPSVYLRLAKTYYTETLKC 360		
QY	361	CAAADPHECYAKVDEKFPLVSEPNQUNIKONCCLFEQOLGEYKQNALLVRYTKVPOYST 420		
Db	361	CAAADPHECYAKVDEKFPLVSEPNQUNIKONCCLFEQOLGEYKQNALLVRYTKVPOYST 420		
QY	421	PTLVEYSRNLGKVGSCKCKHPAKRMPCAEDYLSVYNOLCVLHEKTPVPSDRVTKCCPTES 480		
Db	421	PTLVEYSRNLGKVGSCKCKHPAKRMPCAEDYLSVYNOLCVLHEKTPVPSDRVTKCCPTES 480		
QY	481	LYNRRPESALEVDTTYKFNFAETTFHADICLTSERQKQTALEVLPVKPKRT 540		
Db	481	LYNRRPESALEVDTTYKFNFAETTFHADICLTSERQKQTALEVLPVKPKRT 540		
QY	541	KEOLKAYMDPDAFYEKCKADDKETCFAEKGKKIVASQAAGL 585		
Db	541	KEOLKAYMDPDAFYEKCKADDKETCFAEKGKKIVASQAAGL 585		
RESULT 12				
	AAE11403	standard; Protein:	585 AA.	
ID	AAE11403			
XX				
AC				
XX	AAE12403;			
XX				
DT	18-DEC-2001	(first entry)		
XX				
DE	Human albumin (HA).			
XX				
Human; albumin; HA; immune system disorder; transplant rejection; blood related disorder; myocardial infarction; glomerulonephritis; hyperproliferative disorder; childhood acute myeloid leukaemia; renal cell carcinoma; cardiovascular disorder; pulmonary; melanoma; arrhythmia; respiratory disorder; non-allergic rhinitis; anti-laukaemic; neurological disease; Alzheimer's disease; endocrine disorder; measles; phaeocytochroma; reproductive system disorder; neuroprotective; syphilis; infectious disease; gastrointestinal disorder; wound healing; nontropic; irritable bowel syndrome; HIV; human immunodeficiency virus infection; cytostatic; antiinflammatory; gene therapy; immunosuppressive; cardiant; antiarthritic; antirheumatic; renal disorder; antimicrobial.				
XX				
OS	Homo sapiens .			
XX				
PH				
FT				
FM				
Location/Qualifiers				
Key				
Domain				
54..61				
1..100..1..100..1				

PS Claim 1; Fig 1; 20pp; English.

XX The invention related to a method for testing cancer cells. The method is useful for measuring human cancer cell proliferation, particularly for determining the potential for inhibiting cancer cells proliferation using albumin-derived peptides. The invention is also useful for drug screening assays, as well as for evaluating biopsied tumours. The present sequence is human serum albumin (HSA) related to the invention.

XX Sequence 585 AA;

Query Match 100.0%; Score 3103; DB 22; Length 585;
Best Local Similarity 100.0%; Pred. No. 1e-254;
Matches 585; Conservative 0; Mismatches 0; Gaps 0;

QY 1 DAHKSEVAERFKDQLGKNEFKALVLFIAFQYLQOCPPEDHYKLNEYTFPAKTCVADESAE 60
Db 1 DAHKSEVAERFKDQLGKNEFKALVLFIAFQYLQOCPPEDHYKLNEYTFPAKTCVADESAE 60
QY 61 NCDKSLHTEFLGDKLCTATLRETYGEMADCCAKQEPERNETCQHQDNPNPLPVRPEV 120
Db 61 NCDKSLHTEFLGDKLCTATLRETYGEMADCCAKQEPERNETCQHQDNPNPLPVRPEV 120
QY 121 DYMCTAFAHNEEFKKLYLEIARHPFYAELLEFAKRYKAFFTECQADKACLLP 180
Db 121 DYMCTAFAHNEEFKKLYLEIARHPFYAELLEFAKRYKAFFTECQADKACLLP 180
QY 181 KLDERLDEGKASSAKQRLKASLQRGERAVALYRSLQRFKA 240
Db 181 KLDERLDEGKASSAKQRLKASLQRGERAVALYRSLQRFKA 240
QY 241 VHTECCHGDLLECADCRAILAKYICENODSISSKLCKECCPKLLEKSCIAEVENDMPA 300
Db 241 VHTECCHGDLLECADCRAILAKYICENODSISSKLCKECCPKLLEKSCIAEVENDMPA 300
QY 301 DLPSLAADTYESDVCKNYAAKDVFLGMFLYEARYRHPDYSYVLLRLAKTYETTLERK 360
Db 301 DLPSLAADTYESDVCKNYAAKDVFLGMFLYEARYRHPDYSYVLLRLAKTYETTLERK 360
QY 361 CAAADPHECYAKFDEKPVLVEPONLTKQNCLEFGLGEYKFONALIVRTTKYEQVST 420
Db 361 CAAAPHETCYAKFDEKPVLVEPONLTKQNCLEFGLGEYKFONALIVRTTKYEQVST 420
QY 421 PTLVESRNLGKVSKCCKPEAKERMPCAEDYLSVYLNQCLVHLERTPVSDRVTKCTES 480
Db 421 PTLVESRNLGKVSKCCKPEAKERMPCAEDYLSVYLNQCLVHLERTPVSDRVTKCTES 480
QY 481 LYNRPCFSALEYDTPVKPENATTFTPHADICTSSEKQIKQTALVELYKHKPKA 540
Db 481 LYNRPCFSALEYDTPVKPENATTFTPHADICTSSEKQIKQTALVELYKHKPKA 540
QY 541 KEQLKAVMDDEAFAFEVKCKKADDKETCPAEEGKLYVASQAAIGL 585
Db 541 KEQLKAVMDDEAFAFEVKCKKADDKETCPAEEGKLYVASQAAIGL 585

RESULT 14
ID ABG63321 standard; protein; 585 AA.

XX ABG63321;
XX AC;
XX DT 27-AUG-2002 (first entry)
XX DE Human serum albumin (HSA) protein.
XX

KW Albumin fusion protein; therapeutic protein X; human albumin; HSA; human serum albumin; HSA; cancer; reproductive disorder; digestive disorder; immune disorder; endocrine disorder; hematopoietic disorder; neural disorder; connective disorder; cytosolic; antiinflammatory; antiulcer; immunomodulator; anti-HIV; antidiabetic; haemostatic; nootropic; neuroprotective; antiparkinsonian; antimicrobial; neuroleptic;

Db	361	CAADPHECYAVFDEKFPLVVEPNLQKCNCLPELQEGKFKQNALLRTYKKPVYST	480
QY	421	PTLVYESRNLGKVSKCCKHPEAKRMPCAEDYLSSVVLNOLCYLHEKTPVSDRYTKCCTES	480
Db	421	PTLVESRNLGKVSKCCKHPEAKRMPCAEDYLSSVVLNOLCYLHEKTPVSDRYTKCCTES	480
QY	481	LYNRPCTPSALEDEYYPKRFNAETPFTHADCTLSEKEQIKKQTLALVELVKHKPKAT	540
Db	481	LYNRPCTPSALEDEYYPKRFNAETPFTHADCTLSEKEQIKKQTLALVELVKHKPKAT	540
QY	541	KEQLKAVMDFFAAFVERKCCAKDKEETCFPAEEGKKLYAASQALGL	585
Db	541	KEQLKAVMDFFAAFVERKCCAKDKEETCFPAEEGKKLYAASQALGL	585
	RESULT 15		
	ABJ00986		
ID	ABJ00986	standard; Protein: 585 AA.	
XX			
AC	ABJ00986;		
XX			
DT	05-SEP-2002	(first entry)	
XX			
DE	B lymphocyte stimulator protein binding peptide related protein.		
XX			
KW	B lymphocyte stimulator protein binding protein; BLYS; immune disease; allergy; proliferative disease; infectious disease; arteriosclerosis; inflammatory disorder; hyper gammaglobulinemia; blood clotting; ischaemia; graft-versus-host disease; neurodegenerative disease; immunosuppressive; nephrotoxic; antirheumatic; antiarthritic; neuroprotective; cytostatic; immunostimulant; antitumour; anti HIV; antiasthmatic; antiallergic; thyromimetic; haemostatic; dermatological; antinflammatory; cardiotonic; ophthalmological; uropathic; antidiabetic; antihypertensive; antidepressant; hepatotropic.		
XX			
OS	Homo sapiens.		
XX			
PN	WO200216411-A2.		
XX			
PD	28-FEB-2002.		
XX			
PF	17-AUG-2001; 2001WO-US25850.		
XX			
PR	18-AUG-2000; 2000US-226700P.		
XX			
PA	(HUWA-) HUMAN GENOME SCI INC.		
XX			
P1	Beltzner JP, Potter DM, Fleming TL, Rossen CA;		
XX			
PPRT	2000, 100775 15/		

The treatment of various diseases e.g. rheumatoid arthritis, comprises administering B lymphocyte stimulator binding polypeptide - Disclosure: Page 379-382; 387pp; English.

Sequence 585 AA; *Amphibolite*

Search completed: July 22, 2003, 11:43:43
Job time : 41 secs

Best Local Similarity	100.0%	Pred. No.	1e-254;
Matches	585;	Conservative	0;
		Mismatches	0;
		Gaps	
Y	1	DAHKSEVARFDQDGEENFKALVILIAFQYLQQCPFEDHYKLNEVTEFAKTYADESAE	60
b	1	DAHKSEVARFREKFQGLGENFKALVILIAFQYLQQCPFEDHYKLNEVTEFAKTYADESAE	60
Y	61	NCDKSLSLHTLFGDKLCTVATLRETYGEMDCAKOQEPERNECFLQHQDDNPPLPRVRPV	12
b	61	NCDKSLSLHTLFGDKLCTVATLRETYGEMDCAKOQEPERNECFLQHQDDNPPLPRVRPV	12
Y	121	DYMCATFHNEEFELKKYIYEIARHPHYAPELLFEAKRYKAFTECQQAADKAACLIP	18
b	121	DYMCATFHNEEFELKKYIYEIARHPFYAPELLFFARYKAFTCCQQAADKAACLIP	18
Y	181	KLDELRDEKASSAKOBLKASLOKGFRATAWYARLSORPKKAERAEVSKLVDLK	24
b	181	KLDELRDEKASSAKOBLKASLOKGFRATAWYARLSORPKKAERAEVSKLVDLK	24
Y	241	VTECHQGHDLLEADDRLAKYICENODISISSKIKECCPKPILLEKSHCIAEVENDEMA	30
b	241	VTECHQGHDLLEADDRLAKYICENODISISSKIKECCPKPILLEKSHCIAEVENDEMA	30
Y	301	DPLSAADEFVESSDCKNYAFAKDVYGMFLYEARHPHYSYVLLRLAKTYTENTLKC	36
b	301	DPLSAADEFVESSDCKNYAFAKDVYGMFLYEARHPHYSYVLLRLAKTYTENTLKC	36
Y	361	CAAADPHECYAKYFDEEKPVPEONLTKQNCLBOLQGLGYKFGONALLYRTKVKPVYST	42
b	361	CAAAPHECYAKYFDEEKPVPEONLTKQNCLBOLQGLGYKFGONALLYRTKVKPVYST	42
Y	421	PTLVEVSRNIGKVGSCKCKPEAKMPAEDYLSVYLNLQLCVLKELEKTPVSDRVTRKCTBS	48
b	421	PTLVEVSRNIGKVGSCKCKPEAKMPAEDYLSVYLNLQLCVLKELEKTPVSDRVTRKCTBS	48
Y	481	LYNRRFCPSALEDEVETYPKFENNETTFTHADICTYSEKPROIKKOTALVELVKHKPKAT	54
b	481	LYNRRFCPSALEDEVETYPKFENNETTFTHADICTYSEKPROIKKOTALVELVKHKPKAT	54
Y	541	KEQKLAVAMMDFAAFVEKCCADDKETCPAEKGKLIVASQALGL	585